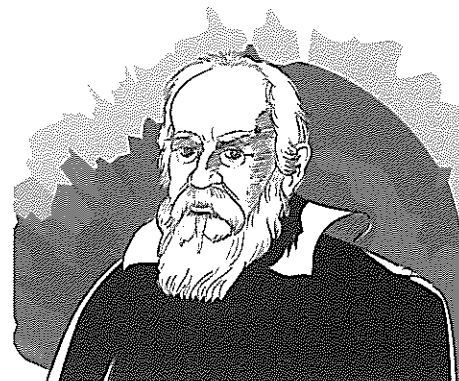


## Perplexing planets

In the early 1600s when Galileo Galilei lived, almost everyone believed that the Earth was the centre of the universe, with the Sun, the Moon and all the planets and stars orbiting the Earth.

Galileo thought differently. He claimed that the Sun was the centre of the universe and that the Earth was one of several planets that orbited the Sun. Galileo was not the first to have this idea, but he was one of the first people to provide evidence to support it.



**Galileo Galilei**

### The evidence

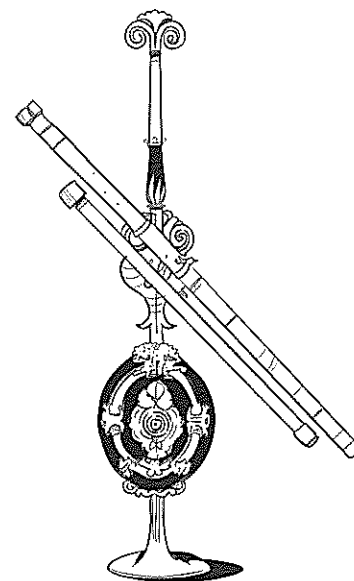
In 1609, Galileo built a telescope powerful enough to see the four largest moons of Jupiter. He observed these four moons for many months and found that they appeared to orbit Jupiter. He wondered how the moons could orbit Jupiter when everything in space was thought to orbit the Earth.

Galileo made more and more powerful telescopes that helped him observe space objects in greater detail. Every observation he made supported his claim that the planets orbited the Sun rather than the Earth.

### A gradual change in beliefs

Galileo published his ideas and these were noticed by people who strongly believed that the Earth was the centre of the universe. They complained to the authorities. Galileo was put under house arrest, which meant that he could not leave his home or receive visitors for the remainder of his life.

Over time, scientists created better telescopes to observe the movement of planets and their moons. The Earth-centred models became increasingly complicated when they were modified to accept new evidence. However, the Sun-centred model already explained this new evidence and people slowly began to accept that model. If only Galileo was still alive today to see his ideas widely accepted!



**Galileo Galilei's  
first telescope**